

<b>Table S11.</b> Association results for the B <sub>12</sub> and folate variants with diseases and traits in deCODE database							
Condition	N cases/ controls	Annotation <sup>1</sup>	Allele <sup>2</sup> (effect/ other)	EAF	Effect	OR	P
<b><i>FUT2 (rs60266) - multiplicative model</i></b>							
B <sub>12</sub>	37,283	G258S	A/G	0.596	0.16		4.1 × 10 <sup>-96</sup>
Cancer antigen 19 9	4,493	G258S	A/G	0.596	0.48		1.1 × 10 <sup>-146</sup>
Liver alkaline phosphatase	49,840	G258S	A/G	0.596	-0.08		1.1 × 10 <sup>-73</sup>
Lipase	14,929	G258S	A/G	0.596	0.10		2.2 × 10 <sup>-24</sup>
Psoriasis	1,657/92,792	G258S	A/G	0.596		1.14	0.0043
Low BMD <sup>3</sup>		G258S	A/G				
Hip, spine or whole body	4,931/69,034	G258S	A/G	0.596		1.10	4.6 × 10 <sup>-4</sup>
Spine	3,015/41,800	G258S	A/G	0.596		1.16	1.3 × 10 <sup>-5</sup>
<b><i>FUT6 (7788053) - recessive model</i></b>							
B <sub>12</sub>	37,283	P124S	A/G	0.254	0.046		2.1 × 10 <sup>-7</sup>
AAA	1,163/61,639	P124S	A/G	0.254		0.65	0.037
AAA <65 years	209/41,800	P124S	A/G	0.254		0.21	0.010
<b><i>MTHFR (rs18011339) - recessive model</i></b>							
Folate	28,913	A222V	<b>G/A</b>	0.668	0.096		1.0 × 10 <sup>-28</sup>
TA	219/31,536	A222V	<b>G/A</b>	0.668		0.48	0.0056

Shown are the strongest association results for the folate and B<sub>12</sub> variants, genome-wide significant or suggestive, with diseases and traits in deCODE's database.

EAF, effect allele frequency; BMD, bone mineral density; AAA, abdominal aortic aneurysm; TA, thoracic aneurysm;

<sup>1</sup>The annotation is based on the RefSeq hg18

<sup>2</sup>The reference alleles based on Build 36 hg18 are shown in bold

<sup>3</sup>The low BMD phenotypes are defined as those BMD values that are below -1 standard deviation (SD) from the mean.